

Exhibit D
'tzlas01.log'

```

SQL> @tzlbac14
SQL>
SQL> CONNECT SCOTT/TIGER
Connected.
SQL>
SQL> CREATE TABLE abc
  2      (COL1 VARCHAR2(45));
Table created.

SQL>
SQL> CREATE TABLE jing
  2      (COL1 VARCHAR2(45));
Table created.

SQL>
SQL> GRANT ALL ON abc TO LBACSYS;

Grant succeeded.

SQL>
SQL> -- This should not be allowed as the user is SCOTT
SQL>   EXECUTE LBAC_SYSDBA.CREATE_POLICY('simple','lbac$test1','raghu');
BEGIN LBAC_SYSDBA.CREATE_POLICY('simple','lbac$test1','raghu'); END;

*
ERROR at line 1:
ORA-06550: line 1, column 7:
PLS-00201: identifier 'LBACSYS.LBAC_SYSDBA' must be declared
ORA-06550: line 1, column 7:
PL/SQL: Statement ignored

SQL>
SQL> CONNECT LBACSYS/LBACSYS
Connected.
SQL>
SQL> -- Create policies in database
SQL>
SQL>   EXECUTE LBAC_SYSDBA.CREATE_POLICY('simple','lbac$test1','raghu');

PL/SQL procedure successfully completed.

SQL>   EXECUTE LBAC_SYSDBA.CREATE_POLICY('complex','lbac$test1','rghu');

PL/SQL procedure successfully completed.

SQL>   EXECUTE LBAC_SYSDBA.CREATE_POLICY('sile','lbac$test1');

PL/SQL procedure successfully completed.

SQL>
SQL> -- Error Conditions
SQL>   EXECUTE LBAC_SYSDBA.CREATE_POLICY('complex','lbac$test1','aghru');
BEGIN LBAC_SYSDBA.CREATE_POLICY('complex','lbac$test1','aghru'); END;

```

```

*
ERROR at line 1:
ORA-12447: policy role already exists for policy complex
ORA-06512: at "LBACSYS.LBAC_STANDARD", line 0
ORA-06512: at "LBACSYS.LBAC_SYSDBA", line .*
ORA-01921: role name 'COMPLEX_DBA' conflicts with another user or role name
ORA-06512: at line 1

SQL> EXECUTE LBAC_SYSDBA.CREATE_POLICY('dummy','lbac$test1');
BEGIN LBAC_SYSDBA.CREATE_POLICY('dummy','lbac$test1'); END;

*
ERROR at line 1:
ORA-12442: policy column "TESTLABEL" already used by an existing policy
ORA-06512: at "LBACSYS.LBAC_SYSDBA", line .*
ORA-06512: at line .*

SQL> EXECUTE LBAC_SYSDBA.CREATE_POLICY('new','lbac$test1','raghu');
BEGIN LBAC_SYSDBA.CREATE_POLICY('new','lbac$test1','raghu'); END;

*
ERROR at line 1:
ORA-12442: policy column "RAGHU" already used by an existing policy
ORA-06512: at "LBACSYS.LBAC_SYSDBA", line .*
ORA-06512: at line .*

SQL> EXECUTE LBAC_SYSDBA.CREATE_POLICY('new123','lbac$ttl','xyz');
BEGIN LBAC_SYSDBA.CREATE_POLICY('new123','lbac$ttl','xyz'); END;

*
ERROR at line 1:
ORA-12412: policy package lbac$ttl is not installed
ORA-06512: at "LBACSYS.LBAC_SYSDBA", line .*
ORA-06512: at line .*

SQL>
SQL> -- This should not fail ...
SQL> EXECUTE
LBAC_SYSDBA.CREATE_POLICY('abcdefghijklmnoprstuvwxyz1234','lbac$test1','fdf');

PL/SQL procedure successfully completed.

SQL>
SQL> EXECUTE
LBAC_SYSDBA.CREATE_POLICY('abcdefghijklmnoprstuvwxyz','lbac$test1','fdf');
BEGIN
LBAC_SYSDBA.CREATE_POLICY('abcdefghijklmnoprstuvwxyz','lbac$test1','fdf'); END;

*
ERROR at line 1:
ORA-12447: policy role already exists for policy abcdefghijklmnopqrstuvwxyz
ORA-06512: at "LBACSYS.LBAC_STANDARD", line 0

```

```
ORA-06512: at "LBACSYS.LBAC_SYSDBA", line .*
ORA-01921: role name 'ABCDEFGHIJKLMNPQRSTUVWXYZ_DBA' conflicts with another
user or role name
ORA-06512: at line 1
```

```
SQL> EXECUTE LBAC_SYSDBA.CREATE_POLICY('india','lbac$test1','fdfefg');
```

```
PL/SQL procedure successfully completed.
```

```
SQL>
```

```
SQL> -- Add 5 policies due to max_label_policies default increase from 5 to 10.
SQL> EXECUTE LBAC_SYSDBA.CREATE_POLICY('ab1','lbac$test1','vc1');
```

```
PL/SQL procedure successfully completed.
```

```
SQL> EXECUTE LBAC_SYSDBA.CREATE_POLICY('ab2','lbac$test1','vc2');
```

```
PL/SQL procedure successfully completed.
```

```
SQL> EXECUTE LBAC_SYSDBA.CREATE_POLICY('ab3','lbac$test1','vc3');
```

```
PL/SQL procedure successfully completed.
```

```
SQL> EXECUTE LBAC_SYSDBA.CREATE_POLICY('ab4','lbac$test1','vc4');
```

```
PL/SQL procedure successfully completed.
```

```
SQL> EXECUTE LBAC_SYSDBA.CREATE_POLICY('ab5','lbac$test1','vc5');
```

```
PL/SQL procedure successfully completed.
```

```
SQL>
```

```
SQL> -- Error Conditions
```

```
SQL> EXECUTE LBAC_SYSDBA.CREATE_POLICY('abc','lbac$test1','vcx');
BEGIN LBAC_SYSDBA.CREATE_POLICY('abc','lbac$test1','vcx'); END;
```

```
*
```

```
ERROR at line 1:
```

```
ORA-12422: max policies exceeded
```

```
ORA-06512: at "LBACSYS.LBAC_SYSDBA", line .*
```

```
ORA-06512: at line 1
```

```
SQL> EXECUTE LBAC_SYSDBA.CREATE_POLICY('simple');
BEGIN LBAC_SYSDBA.CREATE_POLICY('simple'); END;
```

```
*
```

```
ERROR at line 1:
```

```
ORA-06550: line 1, column 7:
```

```
PLS-00306: wrong number or types of arguments in call to 'CREATE_POLICY'
```

```
ORA-06550: line 1, column 7:
```

```
PL/SQL: Statement ignored
```

```

SQL>   EXECUTE
LBAC_SYSDBA.CREATE_POLICY('abcdefghijklmnoprstuvwxyz12345','lbac$test1','ragu')
;
BEGIN
LBAC_SYSDBA.CREATE_POLICY('abcdefghijklmnoprstuvwxyz12345','lbac$test1','ragu')
; END;

*
ERROR at line 1:
ORA-12447: policy role already exists for policy
abcdefghijklmnoprstuvwxyz12345
ORA-06512: at "LBACSYS.LBAC_STANDARD", line 0
ORA-06512: at "LBACSYS.LBAC_SYSDBA", line .*
ORA-01921: role name 'ABCDEFGHIJKLMNPQRSTUVWXYZ_DBA' conflicts with another
user or role name
ORA-06512: at line 1

SQL>
SQL> -- Drop extra 5 policies from above.
SQL>   EXECUTE LBAC_SYSDBA.DROP_POLICY('ab1');

PL/SQL procedure successfully completed.

SQL>   EXECUTE LBAC_SYSDBA.DROP_POLICY('ab2');

PL/SQL procedure successfully completed.

SQL>   EXECUTE LBAC_SYSDBA.DROP_POLICY('ab3');

PL/SQL procedure successfully completed.

SQL>   EXECUTE LBAC_SYSDBA.DROP_POLICY('ab4');

PL/SQL procedure successfully completed.

SQL>   EXECUTE LBAC_SYSDBA.DROP_POLICY('ab5');

PL/SQL procedure successfully completed.

SQL>
SQL> -- Let us check the policies created ...
SQL>   SELECT *
  2   FROM DBA_LBAC_POLICIES
  3   ORDER BY POLICY_NAME;

POLICY_NAME          COLUMN_NAME
-----
PACKAGE              BIN_SIZE STATUS
-----
DEFAULT_FORMAT       POLICY_FORMAT
-----
POLICY_OPTIONS
-----
DATABASE_LABELS
-----
ABCDEFGHIJKLMNPQRSTUVWXYZ1234 FDF

```

LBAC\$TEST1 1 ENABLED

COMPLEX RGHU
LBAC\$TEST1 1 ENABLED

INDIA FDFEFG

POLICY_NAME COLUMN_NAME

PACKAGE BIN_SIZE STATUS

DEFAULT_FORMAT POLICY_FORMAT

POLICY_OPTIONS

DATABASE_LABELS

LBAC\$TEST1 1 ENABLED

SILE TESTLABEL
LBAC\$TEST1 1 ENABLED

SIMPLE RAGHU
LBAC\$TEST1 1 ENABLED

POLICY_NAME COLUMN_NAME

PACKAGE BIN_SIZE STATUS

DEFAULT_FORMAT POLICY_FORMAT

POLICY_OPTIONS

DATABASE_LABELS

5 rows selected.

SQL>

SQL> EXECUTE LBAC_SYSDBA.ENABLE_POLICY('simple');

```

PL/SQL procedure successfully completed.

SQL>
SQL> -- The basic objective from now on is to test the enable/disable procedures
...
SQL>
SQL> EXECUTE LBAC_LABEL_ADMIN.CREATE_LABEL('simple',1,'A,B', TRUE);

PL/SQL procedure successfully completed.

SQL> EXECUTE LBAC_LABEL_ADMIN.CREATE_LABEL('abcdefghijklmnopqrstuvwxyz',2,'A',
TRUE);
BEGIN LBAC_LABEL_ADMIN.CREATE_LABEL('abcdefghijklmnopqrstuvwxyz',2,'A', TRUE);
END;

*
ERROR at line 1:
ORA-12416: policy abcdefghijklmnopqrstuvwxyz not found
ORA-06512: at "LBACSYS.LBAC_CACHE", line .*
ORA-06512: at "LBACSYS.LBAC_LABEL_ADMIN", line .*
ORA-06512: at line 1

SQL>
SQL> EXECUTE
LBAC_USER_ADMIN.SET_USER_LABELS('abcdefghijklmnopqrstuvwxyz','SCOTT',TO_LABEL_LIST.FROM_CHAR('abcdefghijklmnopqrstuvwxyz',NULL,'A'));
BEGIN
LBAC_USER_ADMIN.SET_USER_LABELS('abcdefghijklmnopqrstuvwxyz','SCOTT',TO_LABEL_LIST.FROM_CHAR('abcdefghijklmnopqrstuvwxyz',NULL,'A')); END;

*
ERROR at line 1:
ORA-01405: fetched column value is NULL

SQL>
SQL> SELECT *
2  FROM DBA_LBAC_USER_LABELS ORDER BY USER_NAME, POLICY_NAME;

no rows selected

SQL>
SQL> -- Error Conditions
SQL> EXECUTE
LBAC_POLICY_ADMIN.APPLY_TABLE_POLICY('abcdefghijklmnopqrstuvwxyz','SCOTT','abc')
;
BEGIN
LBAC_POLICY_ADMIN.APPLY_TABLE_POLICY('abcdefghijklmnopqrstuvwxyz','SCOTT','abc')
; END;

*
ERROR at line 1:
ORA-12416: policy abcdefghijklmnopqrstuvwxyz not found
ORA-06512: at "LBACSYS.LBAC_CACHE", line .*
ORA-06512: at "LBACSYS.LBAC_POLICY_ADMIN", line .*
ORA-06512: at line 1

```

```

SQL>
SQL> -- OK now
SQL>   EXECUTE
LBAC_POLICY_ADMIN.APPLY_TABLE_POLICY('complex','SCOTT','abc','NO_CONTROL');

PL/SQL procedure successfully completed.

SQL>   EXECUTE
LBAC_POLICY_ADMIN.APPLY_TABLE_POLICY('complex','SCOTT','jing','NO_CONTROL');

PL/SQL procedure successfully completed.

SQL>   EXECUTE
LBAC_POLICY_ADMIN.APPLY_TABLE_POLICY('simple','SCOTT','abc','DELETE_CONTROL');

PL/SQL procedure successfully completed.

SQL>   EXECUTE
LBAC_POLICY_ADMIN.APPLY_TABLE_POLICY('simple','SCOTT','EMP','DELETE_CONTROL');

PL/SQL procedure successfully completed.

SQL>   EXECUTE
LBAC_POLICY_ADMIN.APPLY_TABLE_POLICY('sile','SCOTT','jing','DELETE_CONTROL');

PL/SQL procedure successfully completed.

SQL>
SQL> CONNECT SCOTT/TIGER
Connected.
SQL>
SQL> DESC abc;
      Name          Null?    Type
-----  -----
COL1           VARCHAR2(45)
RGHU          LBACSYS.LBAC_LABEL
RAGHU         LBACSYS.LBAC_LABEL

SQL>
SQL>   INSERT INTO abc(col1)
  2   VALUES('fdfd');

1 row created.

SQL>
SQL>   UPDATE abc
  2   SET raghu = LBACSYS.TO_LBAC_LABEL('simple','A,B');

1 row updated.

SQL>
SQL> -- Should not allow ...
SQL>   DELETE FROM abc;
      DELETE FROM abc
      *

```

```
ERROR at line 1:  
ORA-12406: unauthorized SQL statement for policy SIMPLE  
ORA-06512: at "LBACSYS.LBAC_STANDARD", line 0  
ORA-06512: at "LBACSYS.LBAC.*"  
ORA-04088: error during execution of trigger 'LBACSYS.LBAC.*'
```

```
SQL>  
SQL>  SELECT coll,LABEL_TO_CHAR(raghu)  
2   FROM abc  
3  ORDER BY coll;
```

COL1

```
-----  
LABEL_TO_CHAR (RAGHU)  
-----  
fdfd  
A,B
```

1 row selected.

```
SQL>  
SQL> -- Error Condition  
SQL>  EXECUTE LBAC_SYSDBA.DISABLE_POLICY('simple');  
BEGIN LBAC_SYSDBA.DISABLE_POLICY('simple'); END;  
  
*  
ERROR at line 1:  
ORA-06550: line 1, column 7:  
PLS-00201: identifier 'LBACSYS.LBAC_SYSDBA' must be declared  
ORA-06550: line 1, column 7:  
PL/SQL: Statement ignored
```

```
SQL>  
SQL> CONNECT LBACSYS/LBACSYS  
Connected.  
SQL>  
SQL>  EXECUTE LBAC_SYSDBA.DISABLE_POLICY('simple');
```

PL/SQL procedure successfully completed.

```
SQL>  
SQL> -- Error Conditions ...  
SQL>  EXECUTE LBAC_SYSDBA.DISABLE_POLICY('abcdefghijklmnoprstuvwxyzfd');  
BEGIN LBAC_SYSDBA.DISABLE_POLICY('abcdefghijklmnoprstuvwxyzfd'); END;  
  
*  
ERROR at line 1:  
ORA-12416: policy abcdefghijklmnoprstuvwxyzfd not found  
ORA-06512: at "LBACSYS.LBAC_SYSDBA", line .*  
ORA-06512: at line 1
```

```
SQL>  EXECUTE LBAC_SYSDBA.DISABLE_POLICY('abcdefghijklmnoprstuvwxyz','fdf');  
BEGIN LBAC_SYSDBA.DISABLE_POLICY('abcdefghijklmnoprstuvwxyz','fdf'); END;
```

```

*
ERROR at line 1:
ORA-06550: line 1, column 7:
PLS-00306: wrong number or types of arguments in call to 'DISABLE_POLICY'
ORA-06550: line 1, column 7:
PL/SQL: Statement ignored

SQL>
SQL> -- Should not delete as the disable will be effective from next session
only
SQL>   DELETE FROM SCOTT.abc;

1 row deleted.

SQL>
SQL> CONNECT SCOTT/TIGER
Connected.
SQL>
SQL>   SELECT col1,LABEL_TO_CHAR(raghu)
  2   FROM abc
  3   ORDER BY col1;

no rows selected

SQL>
SQL> -- Should delete now as the policy is disabled ...
SQL>   DELETE FROM abc;

0 rows deleted.

SQL>
SQL>   SELECT col1,LABEL_TO_CHAR(raghu)
  2   FROM abc
  3   ORDER BY col1;

no rows selected

SQL>
SQL>   INSERT INTO abc(col1)
  2   VALUES('123233');

1 row created.

SQL>
SQL> -- Error Condition ...
SQL>   EXECUTE LBAC_SYSDBA.ENABLE_POLICY('simple');
BEGIN LBAC_SYSDBA.ENABLE_POLICY('simple'); END;

*
ERROR at line 1:
ORA-06550: line 1, column 7:
PLS-00201: identifier 'LBACSYS.LBAC_SYSDBA' must be declared
ORA-06550: line 1, column 7:
PL/SQL: Statement ignored
```

```

SQL>
SQL> CONNECT LBACSYS/LBACSYS
Connected.
SQL>
SQL> EXECUTE LBAC_SYSDBA.ENABLE_POLICY('simple');

PL/SQL procedure successfully completed.

SQL>
SQL> -- Error Conditions ...
SQL> EXECUTE LBAC_SYSDBA.ENABLE_POLICY('simpler1');
BEGIN LBAC_SYSDBA.ENABLE_POLICY('simpler1'); END;

*
ERROR at line 1:
ORA-12416: policy simpler1 not found
ORA-06512: at "LBACSYS.LBAC_SYSDBA", line .*
ORA-06512: at line 1

SQL> EXECUTE LBAC_SYSDBA.ENABLE_POLICY('simple',FALSE);
BEGIN LBAC_SYSDBA.ENABLE_POLICY('simple',FALSE); END;

*
ERROR at line 1:
ORA-06550: line 1, column 7:
PLS-00306: wrong number or types of arguments in call to 'ENABLE_POLICY'
ORA-06550: line 1, column 7:
PL/SQL: Statement ignored

SQL>
SQL> -- Should delete now as the enable will be effective only from new session
SQL> DELETE FROM SCOTT.abc;

1 row deleted.

SQL>
SQL> CONNECT SCOTT/TIGER
Connected.
SQL>
SQL> -- Expecting no rows ...
SQL> SELECT col1,LABEL_TO_CHAR(raghu)
  2  FROM abc
  3  ORDER BY col1;

no rows selected

SQL>
SQL> INSERT INTO abc(col1)
  2  VALUES('1232');

1 row created.

SQL>
SQL> -- Delete should fail ...

```

```
SQL>    DELETE FROM abc;
      DELETE FROM abc
      *
ERROR at line 1:
ORA-12406: unauthorized SQL statement for policy SIMPLE
ORA-06512: at "LBACSYS.LBAC_STANDARD", line 0
ORA-06512: at "LBACSYS.LBAC.*"
ORA-04088: error during execution of trigger 'LBACSYS.LBAC.*'
```

```
SQL>
SQL>    SELECT col1,LABEL_TO_CHAR(raghu)
  2    FROM abc
  3    ORDER BY col1;
```

```
COL1
-----
LABEL_TO_CHAR (RAGHU)
-----
1232
```

1 row selected.

```
SQL>
SQL> CONNECT LBACSYS/LBACSYS
Connected.
SQL>
SQL> EXECUTE LBAC_SYSDBA.DROP_POLICY('simple',TRUE);
PL/SQL procedure successfully completed.

SQL> EXECUTE LBAC_SYSDBA.DROP_POLICY('complex', FALSE);
PL/SQL procedure successfully completed.

SQL> EXECUTE LBAC_SYSDBA.DROP_POLICY('sile');
PL/SQL procedure successfully completed.

SQL> EXECUTE LBAC_SYSDBA.DROP_POLICY('abcdefghijklmnopqrstuvwxyz1234');
PL/SQL procedure successfully completed.

SQL> EXECUTE LBAC_SYSDBA.DROP_POLICY('abcdefghijklmnopqrstuvwxyz');
BEGIN LBAC_SYSDBA.DROP_POLICY('abcdefghijklmnopqrstuvwxyz'); END;
*
ERROR at line 1:
ORA-12416: policy abcdefghijklmnopqrstuvwxyz not found
ORA-06512: at "LBACSYS.LBAC_STANDARD", line 0
ORA-06512: at "LBACSYS.LBAC_SYSDBA", line .*
ORA-06512: at line 1

SQL> EXECUTE LBAC_SYSDBA.DROP_POLICY('india');
```

PL/SQL procedure successfully completed.

```
SQL>
SQL> -- Error Conditions
SQL>   EXECUTE LBAC_SYSDBA.DROP_POLICY('adfd');
BEGIN LBAC_SYSDBA.DROP_POLICY('adfd'); END;
```

```
*  
ERROR at line 1:  
ORA-12416: policy adfd not found  
ORA-06512: at "LBACSYS.LBAC_STANDARD", line 0  
ORA-06512: at "LBACSYS.LBAC_SYSDBA", line .*  
ORA-06512: at line 1
```

```
SQL>   EXECUTE LBAC_SYSDBA.DROP_POLICY('simple',XYZ);
BEGIN LBAC_SYSDBA.DROP_POLICY('simple',XYZ); END;
```

```
*  
ERROR at line 1:  
ORA-06550: line 1, column 40:  
PLS-00201: identifier 'XYZ' must be declared  
ORA-06550: line 1, column 7:  
PL/SQL: Statement ignored
```

```
SQL>
SQL>   SELECT *
  2   FROM DBA_LBAC_POLICIES
  3   ORDER BY POLICY_NAME;
```

no rows selected

```
SQL>
SQL> CONNECT SCOTT/TIGER
Connected.
SQL>
SQL> -- Simple policy was applied on two tables (abc,emp) the hidden column
should
SQL> -- be dropped as the TRUE option is set; Policy complex was applied to
SQL> -- two tables(abc,jing) and hidden column should not be dropped as the
option
SQL> -- was set to FALSE; Policy sile was applied to a table (jing) and the
hidden
SQL> -- column should not be dropped as the default option is FALSE.
```

```
SQL>
SQL>   DESC abc;
Name          Null?    Type
-----  
COL1          VARCHAR2(45)
RGHU          LBACSYS.LBAC_LABEL
```

```
SQL>   DESC jing;
Name          Null?    Type
-----  
COL1          VARCHAR2(45)
```

```
RGHU                                         LBACSYS.LBAC_LABEL
TESTLABEL                                     LBACSYS.LBAC_LABEL

SQL> DESC EMP;
      Name          Null?    Type
-----+-----+-----+
EMPNO           NOT NULL NUMBER(4)
ENAME            VARCHAR2(10)
JOB              VARCHAR2(9)
MGR              NUMBER(4)
HIREDATE        DATE
SAL              NUMBER(7,2)
COMM             NUMBER(7,2)
DEPTNO           NUMBER(2)

SQL>
SQL> DROP TABLE abc;

Table dropped.

SQL> DROP TABLE jing;

Table dropped.

SQL>
SQL> SET ECHO OFF
```